

PAT 34/1987

## CLAIMS

1. An integrated pulley-torsional damper assembly including a hub (2) designed for being rigidly connected to a drive member (3), a pulley (4) connected to the hub (2) by means of a first elastomeric ring (5) having the function of a filter for torsional oscillations, an inertia ring (6) connected to the hub (2) by means of a second elastomeric ring (7) defining with the inertia ring (6) a damping system, said hub (2) comprising an internal annular flange (10) designed for connection to said drive member (3), said hub (2) comprising, integrally with said internal annular flange (10), an annular coupling portion (14) having a substantially C-shaped cross section, which is open axially on the side where said internal annular flange (10) is located and forms a cavity (9), said coupling portion (14) comprising an outer tubular wall (12), on which said second elastomeric ring (7) is fitted, a bearing (34) being set between said outer tubular wall (12) and said pulley (4) for radial and axial support of said pulley (4) with respect to said hub (2), said pulley (4) comprising a peripheral crown (15) and a flange (17) extending radially inwards from said peripheral crown (15), said flange (17) comprising an outer annular portion (19), an intermediate tubular wall (20) coaxial

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with respect to said crown (15) and internal thereto, characterized by comprising a coupling flange (25) provided with an inner annular wall (26) bearing axially against said flange (10) of said hub (2) and with a  
5 peripheral annular edge (27), and in that said flange (17) of said pulley (4) includes an inner annular flange (21) extending from an axial end of the tubular wall (20) opposite to the outer annular portion (19), said first elastomeric ring (5) being set axially between  
10 said inner annular flange (21) of said pulley (4) and said peripheral annular edge (27) of said coupling flange (25), and forming a single body with them; said inertia ring (6) being contained inside said crown (15) of said pulley (4), said first elastomeric ring (5)  
15 being housed within said cavity (9) of said annular coupling portion (14).

2. The assembly according to Claim 1, characterized in that said bearing (34) comprises integrally a tubular portion (35), radially set between said outer tubular  
20 wall (12) of said hub (2) and said intermediate tubular wall (20) of said pulley (4), and a flange (36) axially set between said outer annular portion (19) of said flange (17) of said pulley (4) and said outer tubular wall (12) of said hub (2).